(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 3 February 2005 (03.02.2005)

PCT

(10) International Publication Number WO 2005/010121 A1

(51) International Patent Classification7:

C09K 11/59

(21) International Application Number:

PCT/KR2004/001838

(22) International Filing Date:

24 July 2004 (24.07.2004)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data: 10-2003-0051306

25 July 2003 (25.07.2003) KR

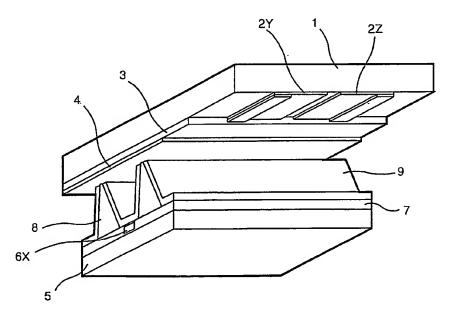
- (71) Applicant (for all designated States except US): LG ELECTRONICS INC. [KR/KR]; 20, Yoido-dong, Youngdungpo-ku, Seoul 150-010 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KIM, Hyang-Mi [KR/KR]; 14/6, 426-14, Songdo-dong, Nam-ku, Pohang-shi, Kyoungsangbuk-do 790-829 (KR). LEE, Soon-Rewl [KR/KR]; #112-702, Moogunghwa Hanyang

Apartment, 16-1, Hogye-dong, Dongan-ku, Ahnyang-shi, Kyounggi-do 431-080 (KR). WOO, Sung-Ho [KR/KR]; 209-50, Beomeo 4-dong, Susung-ku, Daegu 706-822 (KR).

- (74) Agent: KIM, Young-Ho; Kamryoung Bldg., 3rd Floor, 153-29 Samsung-dong, Kangnam-ku, Seoul 153-090 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: GREEN PHOSPHOR AND PLASMA DISPLAY PANEL USING THE SAME



(57) Abstract: There is disclosed a green phosphor that is adaptive for improving its driving voltage and brightness characteristic, and at the same time, improving its color purity. A green phosphor according to an embodiment of the present invention includes a mixed phosphor composed of a first class phosphor of Zn₂SiO₄:Mn, a second class phosphor of at least one of LaPO₄:Tb, Y₃Al₃(BO₃)₄Tb, Y(Al, Ga)5012:Tb, YBO3:Tb, (Y, Gd)BO3:Tb, and a third class phosphor of at least one of BaAl12O19:Mn, BaAl14023:Mn, Ba(Sr, Ma)AlO:Mn, and the mixing rate of the third class phosphor to the total weight of the mixed phosphor is 1~25 wt %.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report